

E. CHURN IS NOT INDICATIVE OF COMPETITION FOR THE AVERAGE RESIDENTIAL CUSTOMER

AT&T cites a churn rate of just under 20 percent (Rosston, p. 21) and other IXC commenters cite churn as evidence of competition. Unfortunately, this tells us nothing about the average consumer. High volume consumers have been repeatedly targeted by the industry with promotion. The top 25 percent of the market is repeatedly targeted by the industry with promotions, so they are likely to churn. Average consumers might be misled into switching to these plans, discover that they are more expensive, because advertising is uninformative, and switch back. Churn does not demonstrate that the market is working “to the benefit of all consumers.”

IV. CONCLUSION

The above analysis looks at bills and prices. It uses survey and other data. It takes into account a reasonable amount of shifting between service offerings to mitigate the impact of bottom of the bill charges. All the evidence points to one conclusion,

- ◆ the majority of consumers have suffered a net increase in their bills as a result of long distance industry rate restructuring and low income users have suffered the most.

Industry claims that consumers can shift between plans to avoid the impact entirely are dubious at best. It is quite clear that discount plans are of little use to low volume consumers

since minimum use requirements make them even more expensive than the \$3 minimum imposed on basic rate customers. Discount plans are targeted at high volume users.

Dial-around services might save low volume users some money, but they are difficult to research and highly targeted at specific types of calls. If the consumer does not make the right type of call, he or she can end up paying a very high rate. Given the movement of average rates, it is simply not possible that dial-around use could mitigate the increase in actual bills paid sufficiently to change the basic conclusion.

The irony with claiming that dial-around services might save consumers money is that the FCC and the industry touted one-plus dialing as convenient and crucial to competition. We now find that low volume users, who helped pay for one-plus dialing, are forced to go back to dialing seven digits by the brutal price discrimination that competition for high volume users has fostered. In the unlikely event that low volume users do save some money with dial-around service, they suffer the inconvenience of dialing extra digits; the problem of having to figure out on each call which of the services might be less expensive; the risk of being charged multiple universal service charges; and the indignity of knowing that one-plus dialing that they helped to pay for does them no good.

Dated: October 20, 1999

Respectfully submitted,

Consumer Federation of America
Consumers Union (Washington, D.C. Regional Office)
Texas Office of Public Utility Counsel

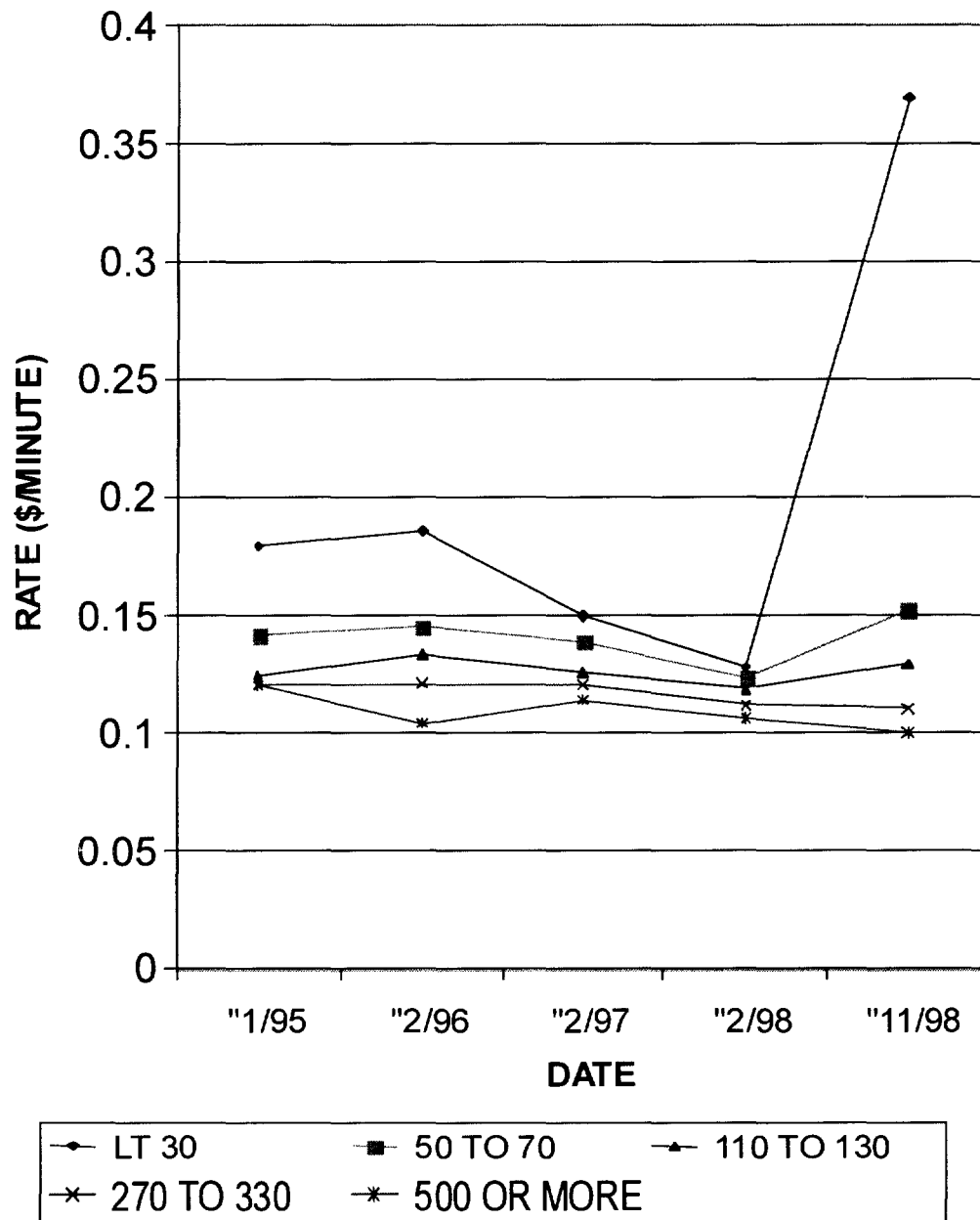
ATTACHMENT A:
EXHIBITS

EXHIBIT 1:
CFA/CU/TXOPC SURVEY DATA USED IN THE ANALYSIS

INCOME GROUPS	% OF POP.	% WITH BILL ≤ \$5	LD BILL AS % OF NAT. AVG.	% WITH 2 nd LINE	% WITH INTERNET
LT 10	6	22	70	11	21
10-15	6	28	64	7	28
15-20	6	27	71	15	17
20-25	7	29	74	11	29
25-30	10	21	92	17	26
30-35	9	23	98	17	32
35-40	10	25	99	21	38
40-50	11	16	92	25	57
50-70	18	12	109	30	57
70-100	9	6	133	39	67
100 +	9	6	139	48	85

SOURCE: CFA/CU/TXOPC Survey

**EXHIBIT 2:
PRICE CHANGES AT VARIOUS LEVELS OF USE**



SOURCE: FCC, *Reference Book of Rates, Price Indices and Expenditures for Telephone Service*, June 1999, p. 47.

EXHIBIT 3
CHANGES IN THE COST OF HAVING A LONG DISTANCE COMPANY FOR LOW VOLUME
CONSUMERS SINCE THE PASSAGE OF THE TELECOMMUNICATIONS ACT OF 1996

(FEDERAL JURISDICTIONAL CHARGES AND AT&T IMPOSED BILL ELEMENTS)

BILL ELEMENT	MONTHLY USAGE								
	NO CALLS		25 MINUTES OF CALLS		50 MINUTES OF CALLS		100 MINUTES OF CALLS		NEW AT&T .07 @ 100 MIN.
	PERIOD		PERIOD		PERIOD		PERIOD		PERIOD
	2/96	9/99	2/96	9/99	2/96	9/99	2/96	9/99	9/99
SLC	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
PICC	0	1.50	0	1.50	0	1.50	0	1.50	1.50
USF	0	1.00	0	1.00	0	1.00	0	1.00	1.00
MINIMUM BILL/FEE	0	3.00	0	0	0	0	0	0	5.95
TOTAL FIXED FIXED	3.50	9.00	0	6.00	0	6.00	3.50	6.00	11.95
USAGE	0	0	4.75	4.50	7.50	7.00	14.00	12.00	7.00
TOTAL LD BILL	3.50	9.00	8.25	10.50	11.00	13.00	17.50	18.00	18.95
BILL CHANGE	+5.50		+2.25		+2.00		+.50		

Sources: Federal Communications Commission, *Reference Book of Rates Price Indices and Expenditures for Telephone Service*, June 1999, Table 2.4; "Notice of Inquiry," *In the Matter of Low Volume Long Distance Users*, July 8, 1999.

EXHIBIT 4
CHARACTERISTICS OF THE DISTRIBUTION OF RESIDENTIAL
USE OF TOLL SERVICES

	MEAN	MEDIAN	% WITH ZERO
TOTAL TOLL	144	87	12
INTERLATA TOLL	97	NA	NA
INTERLATA, INTERSTATE	71	NA	38

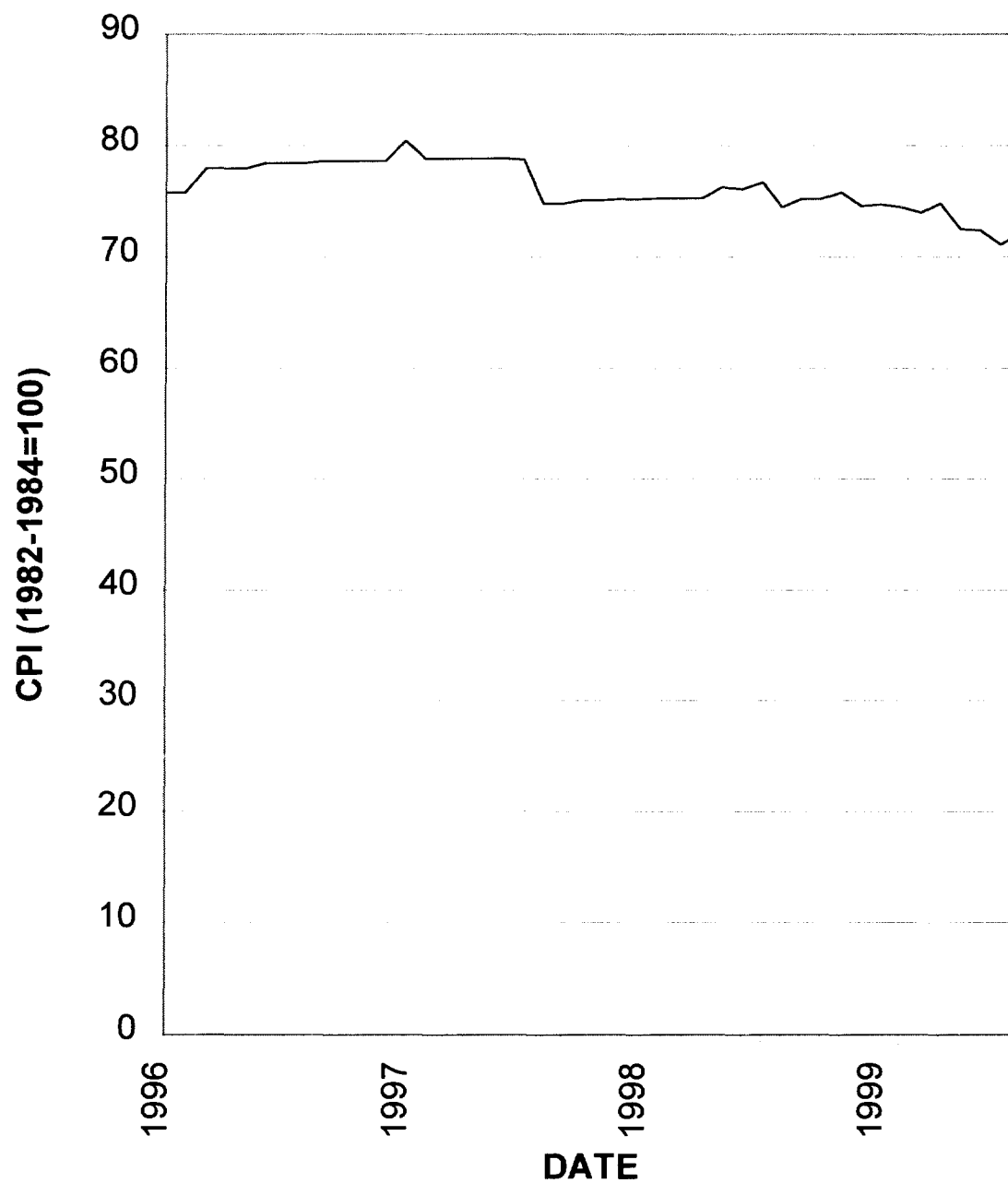
SOURCE: FCC, *Trends in Telephone Service*, September 1999, Chapter 16.

EXHIBIT 5
ESTIMATE OF INCREASE IN NET LONG DISTANCE BILL
FOR RESIDENTIAL USERS WITH BELOW AVERAGE USAGE

LEVEL OF USE	MILLIONS OF HOUSEHOLDS	NET MONTHLY INCREASE (\$/month)	TOTAL ANNUAL INCREASE (\$, Billions)
ZERO	15	\$5.50	\$1
1-30 MINUTES	15	3.875	.7
30-50 MINUTES	20	2.12	.5
50-75 MINUTES	20	.50	.1
TOTAL	70		2.3

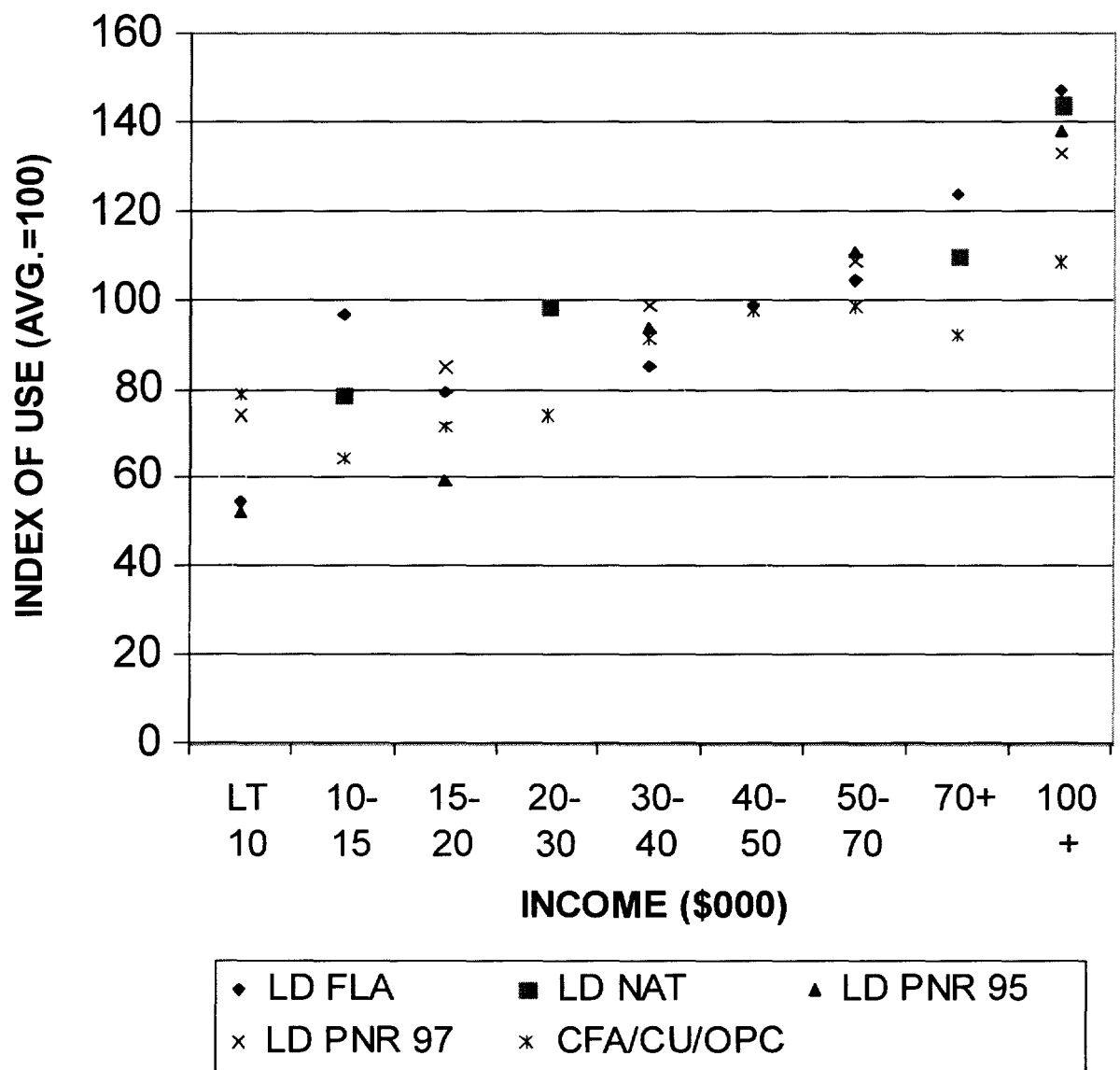
SOURCE: See text for the derivation of these estimates

**EXHIBIT 6:
INTERSTATE TOLL PRICES
AFTER THE BREAK UP OF AT&T**



SOURCE: Bureau of Labor Statistics, *Consumer Price Index – All Urban*

EXHIBIT 7 **THE CLEAR RELATIONSHIP BETWEEN INCOME** **AND USAGE**



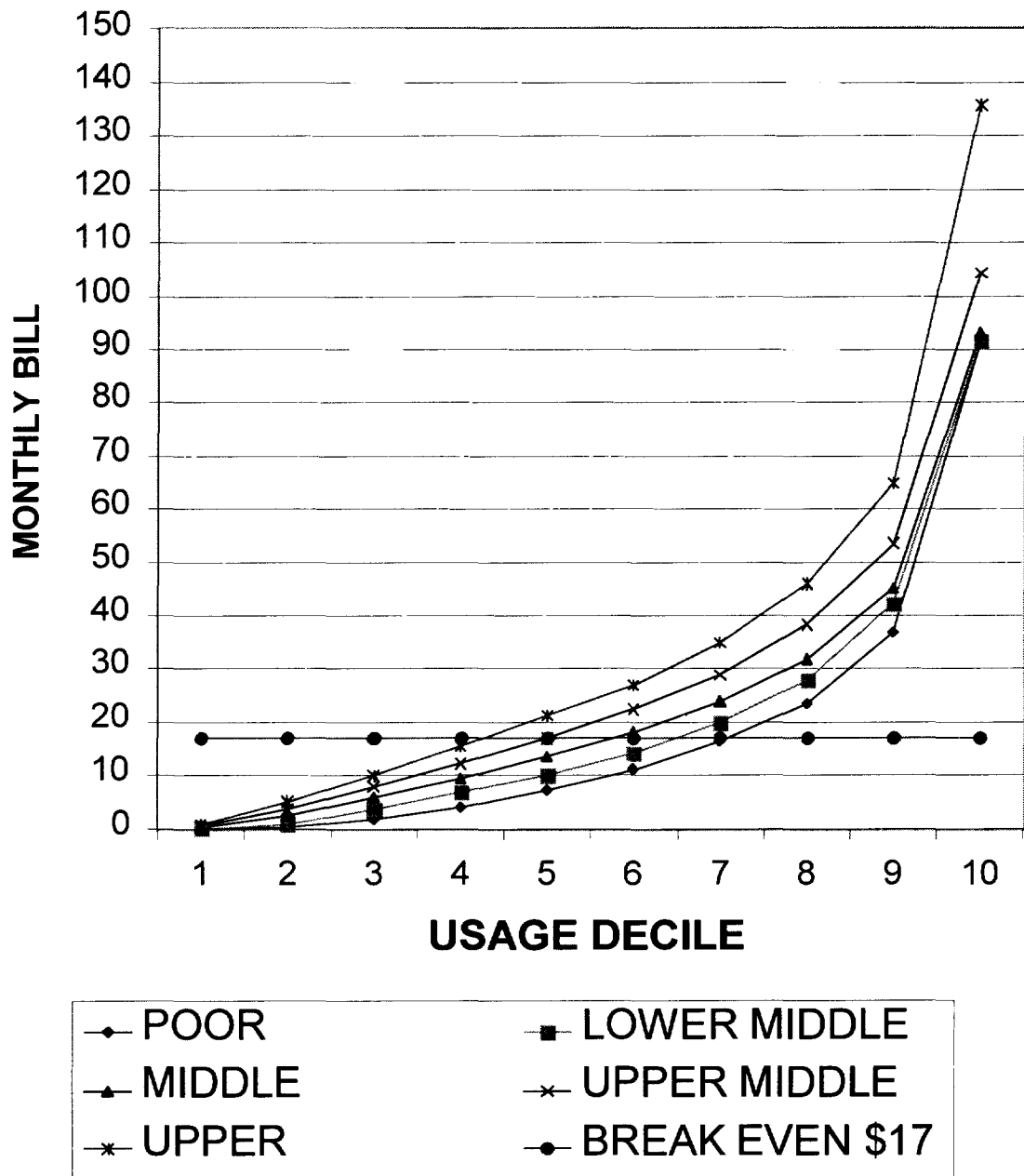
SOURCE: Florida PSC Survey; Yankee Group; PNR as reported in Crandall, 1995; PNR as reported by MCI, 1997; CFA/CU/TXOPC Survey.

EXHIBIT 8

DESCRIPTION OF INCOME GROUPS

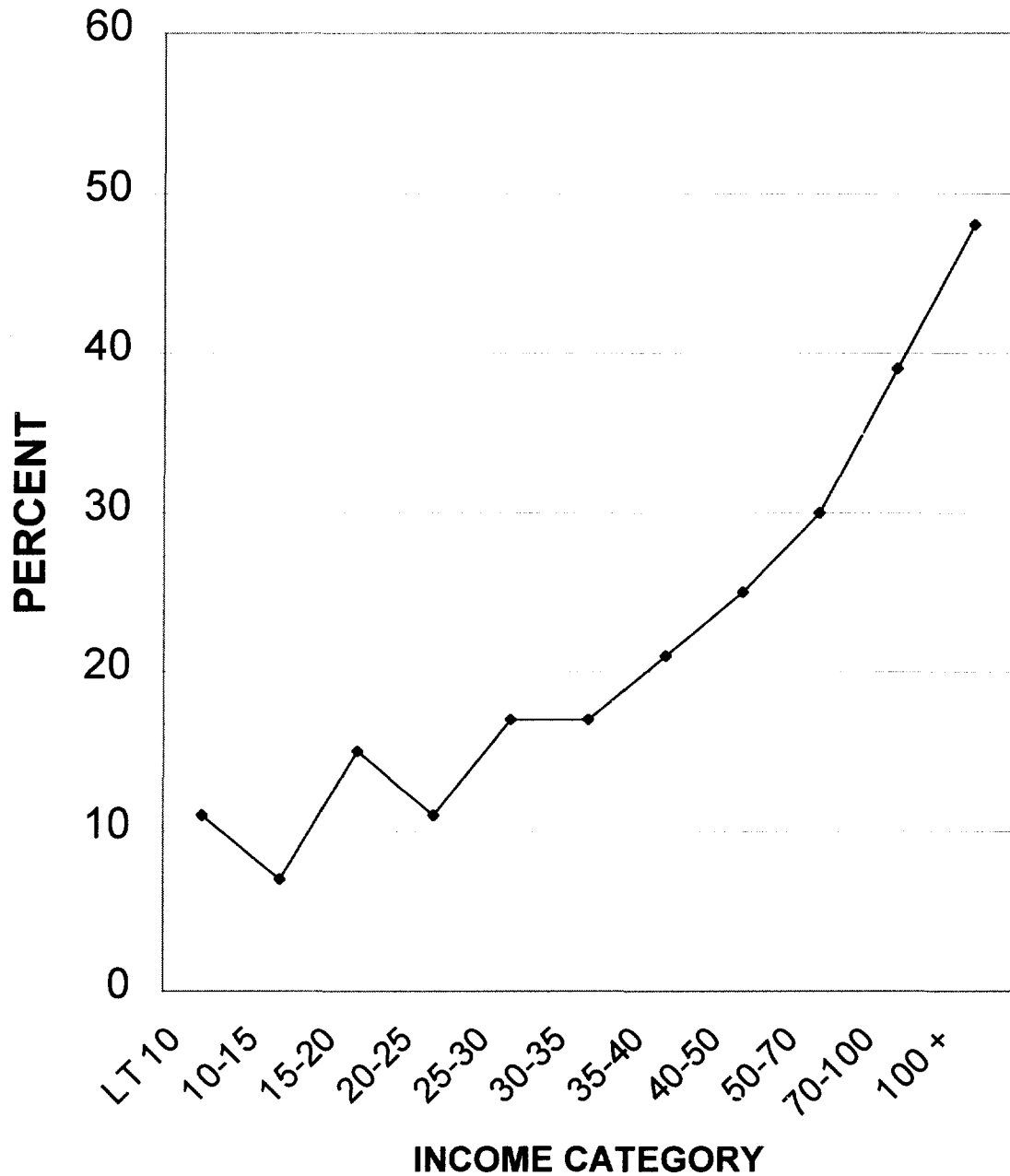
DESCRIPTOR	SOURCE					SURVEYS			
	PNR BILL HARVESTING ANALYSES BY INDUSTRY								
	PNR 1997 ANALYSIS (MCI)			PNR 1995 ANALYSIS (BABY BELLS)		FLORIDA PSC		CFA/CU/TXOPC	
	QUINTILE	MEAN INCOME	% OF POP.	INCOME CATEGORY	% OF POP.	INCOME CATEGORY	% OF POP.	INCOME CATEGORY	% OF POP.
Poor	Bottom fifth	8,872	20	LT \$10K	12	LT \$20K	27	LT 20K	17
Lower middle	Second fifth	22,098	20	10-20K	16	20-30K	18	20-35K	26
Middle	Third fifth	37,177	20	20-40K	31	30-50	27	35-50K	21
Upper middle	Fourth fifth	57,582	20	40-75K	31	50-80	15	50-75K	18
Wealthy	Highest fifth	122,764	20	\$75+	9	80+	13	75+	18

EXHIBIT 9: DISTRIBUTION OF USAGE BY INCOME GROUPS



SOURCE: PNR as reported by Crandall.

**EXHIBIT 10:
PERCENT OF HOUSEHOLDS WITH
MULTIPLE LINES**



SOURCE: CFA/CU/TXOPC Survey

EXHIBIT 11:

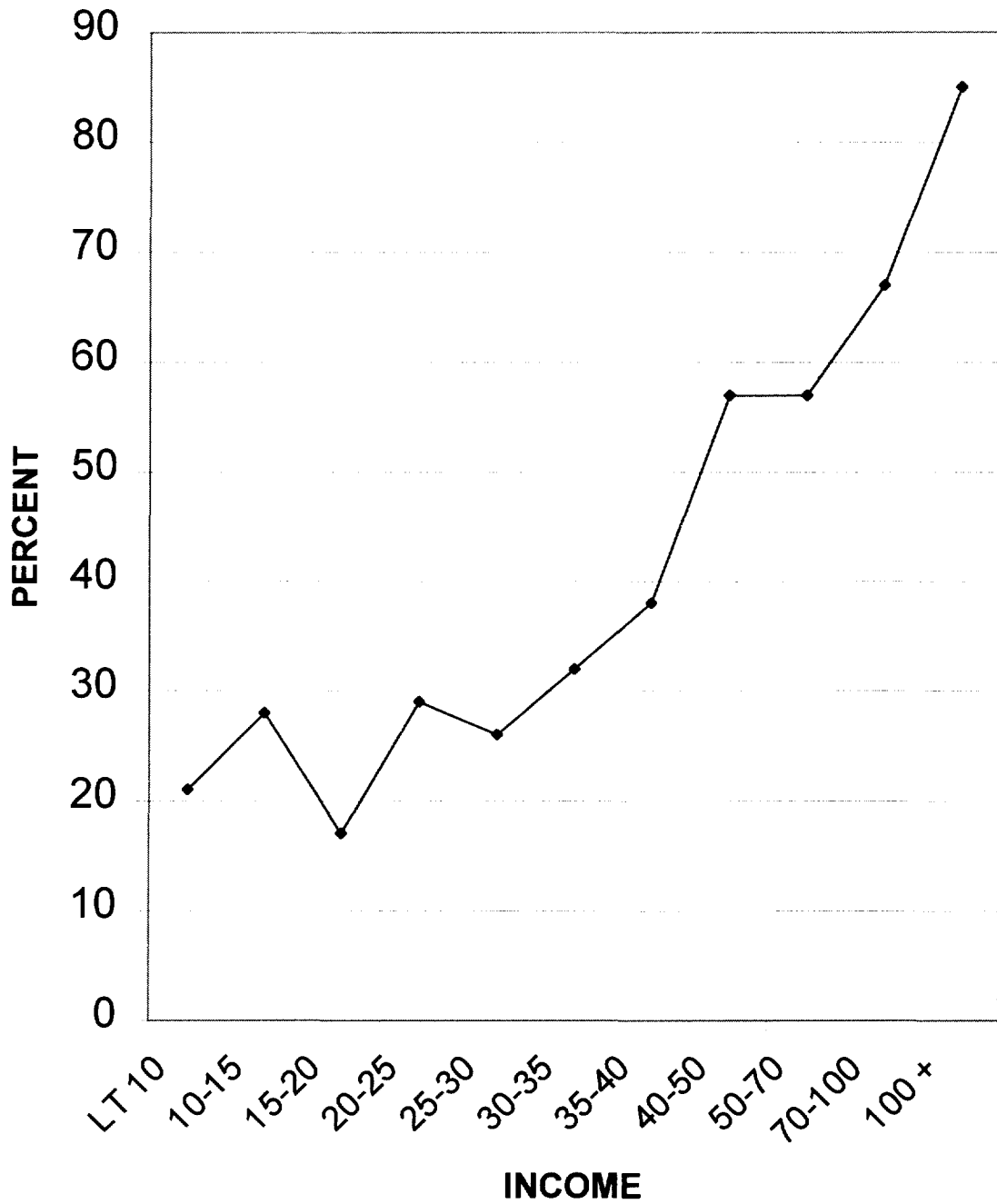
LOW USAGE CUSTOMERS (BILLS \leq \$5)

IN THE PNR DATABASE AND THE CFA/CU/TXOPC SURVEY

	MCI/PNR		CFA/CU/TXOPC		FLA PSC	
	% OF POP.	% WITH LOW USE	% OF POP.	% WITH LOW USE	% OF POP.	% WITH LOW USE
POOR	20	27	17	26	27	34
LOWER MIDDLE	20	21	26	24	18	25
MIDDLE	20	19	21	20	27	14
UPPER MIDDLE	16	18	18	12	15	9
WEALTHY	20	13	18	6	13	11

SOURCE: MCI based on PNR; CFA/CU/TXOPC Survey.

EXHIBIT 12: INTERNET AT HOME



SOURCE: CFA/CU/TXOPC Survey

ATTACHMENT B

**DECLARATION OF DR. MARK N. COOPER
DIRECTOR OF RESEARCH
CONSUMER FEDERATION OF AMERICA**

STATE OF TEXAS §
 §
COUNTY OF TRAVIS §

AFFIDAVIT

DECLARATION OF DR. MARK N. COOPER

I, Mark N. Cooper, on my oath do hereby depose, swear and state as follows:

I. BACKGROUND

A. QUALIFICATIONS

1. My name is Mark N. Cooper. I am President of Citizens Research. I am also Director of Research of the Consumer Federation of America (CFA). Prior to founding Citizens Research in 1983, a consulting firm specializing in economic, regulatory and policy analysis, I spent four years as Director of Research at the Consumer Energy Council of America. Prior to that I was an Assistant Professor at Northeastern University teaching courses in Business and Society in the College of Arts and Sciences and the School of Business. I have also been a Lecturer at the Washington College of Law of the American University co-teaching a course in Public Utility Regulation.

2. I have testified on various aspects of telephone and electricity rate making before the public utility commissions of 29 states, the District of Columbia, and Manitoba as well as the Federal Communications Commission (FCC), the Canadian Radio-Television and Telephone Commission (CRTC) and a number of state legislatures.

3. For a decade and a half I have specialized in analyzing regulatory reform and market structure issues in a variety of industries including telecommunications, railroads, airlines, natural gas, electricity, medical services and cable television. This includes approximately 300 pieces of testimony presented to state regulatory bodies, federal legislative bodies, and federal administrative bodies.

4. I have written several major works on universal service and the impact of rising prices for utilities on consumer in general and low income households in particular. These include *Equity and Energy: Rising Energy Prices and the Living Standards of Lower Income Americans* (Westview Press: Boulder, 1982), "protecting the Public Interest in the Transition of Competition in Network Industries," *The Electric Utility Industry in Transition* (Public Utilities Reports, Inc., 1994); *Universal Service: A Historical Perspective and Policies for the Twenty-First Century* (Benton Foundation and the Consumer Federation of America, 1996).

B. PURPOSE OF THE ANALYSIS

5. The purpose of this affidavit is to present empirical analysis and data as requested in the Federal Communications Commission's Notice of Inquiry (NOI) regarding low volume, residential users.²² The central focus of the NOI is to assess the impact of recent bottom-of-the-bill charges -- the Presubscribed Interexchange Carrier Charge (PICC), Universal Service Fee (USF), monthly fees and minimum usage requirements (MUR) -- on residential long distance consumers. These charges are new or have grown in importance since the passage of the Telecommunications Act of 1996 and particularly since this Commission set out to "reform" its access charge regime.

6. Two issues are central to the NOI. First, have residential consumers endured increases in their monthly bills as a result of the changes in pricing? If so, how many? Second, do the bottom of the bill charges disproportionately harm low income consumers? If so, how severe is the impact?

C. PRIMARY CONCLUSIONS

7. The evidence presented in this proceeding ends any question about the general impact of these charges.²³ Analysis of actual bills and price indices shows that the increase in fixed item charges has resulted in increased phone bills for the majority of residential long distance consumers.

- ◆ Well over half and perhaps as many as two-thirds of all residential customers have experienced this increase because the reduction in per minute charges for usage has not been large enough to offset the increase in bottom of the bill charges.
- ◆ Thus, between 50 and 70 million households have been adversely affected.

²² Federal Communications Commission, *In the Matter of Low-Volume Long-Distance Users*, CC Docket No. 99-249, July 20, 1999.

²³ The following Comments, all filed on September 22, 1999, provide the industry's substantive analysis of pricing -- *Comments of AT&T* (hereafter AT&T) in particular Exhibit 1, which is *Declaration of Gregory L. Rosston* (hereafter Rosston); *MCI Worldcom, Inc., Comments* (hereafter MCI) and an attached paper by George S. Ford entitled *An Economic Analysis of the FCC's Notice of Inquiry on Flat Rate Changes in the Long Distance Industry* (hereafter Ford), as well as a paper by Robert W. Crandall entitled *Telephone Subsidies, Income Redistribution, and Consumer Welfare* (hereafter Crandall), which was attached to comments of the United States Telephone Association.

8. Claims by interexchange companies (IXCs) that long distance are “the lowest they have ever been (MCI, p. 3)” are true only if the analysis includes business rates and excludes the bottom-of-the-bill charges paid by residential customers. In other words, these claims are false if one looks at the actual bills paid by residential customers, which is the focus of this NOI.

9. Low income consumers are disproportionately low volume consumers. Therefore, low-income, low-volume consumers are hardest hit by these new pricing schemes.

- ◆ About 70 percent of the poorest Americans have suffered a net increase in their bills as a result of recent rate restructuring.
- ◆ About 60 percent of the wealthiest Americans have enjoyed a net decrease in their long distance bills.

10. Claims that there is “virtually no correlation between income and low-volume long distance usage” (AT&T, p. 3) or that the relationship is “very weak” (MCI, p. 9) and therefore that the bottom of the bill increase “does not have a material impact on low-income users as a group” (AT&T, p. 3, MCI, p. 10) are simply wrong. Low-income consumers are much more likely to be low volume consumers and to have suffered a significant increase in their long distance bills.

D. DATA SOURCES

11. To reach these conclusion, I have conducted primary analysis of the results of two recent surveys of consumers – one conducted by the Florida Public Service Commission in mid-1998, another conducted by the Consumer Federation of America, Consumers Union, and the Texas Office of Public Utility Counsel in October of 1999. Exhibit 1 presents the key population characteristics of this new survey that will be used in my analysis.

12. I have conducted secondary analysis of descriptive statistics presented to the commission based on bill harvesting data prepared by PNR research.²⁴

13. I have also relied on government statistics – FCC²⁵ and Bureau of Labor reports²⁶ – to estimate the relative size of bill impacts.

²⁴ See footnote 2 for the sources of this data.

²⁵ *Reference Book of Rates, Price Indices and Expenditures for Telephone Service*, June 1999; *Trends in Telephone Service*, September 1999.

²⁶ *Consumer Price Index, All Urban Consumers*.

14. Because the surveys are based on self-reported bills, rather than actual bills, and because the data sets cover different periods of time, I calculate bills within each income group as a percentage of the average bill. This takes into account two factors – the tendency of self-reported bills to be higher than actual bills and the tendency of bills to increase over time. Thus, I analyze the relative bill at a given point in time and for a given method of reporting the bill. The companies, who have actual billing data on an account basis, have not compiled it properly or analyzed it consistently. Therefore, I urge the Commission to gather statistically valid, independently verified, meaningful data and make it available for the public scrutiny and analysis.

II. SETTING THE RECORD STRAIGHT: MOST CONSUMERS ARE SEEING A GROWING BOTTOM LINE

A. BOTTOM OF THE BILL CHARGES HAVE INCREASED THE COST OF LONG DISTANCE SERVICE UP TO APPROXIMATELY 130 MINUTES PER MONTH OF USAGE

1. Increasing Rates

15. The Commission can look to its own data to see that basic trends in residential long distance rates indicate a problem with the current pricing schemes. Exhibit 2 is taken from data on long distance rates published by the FCC.

- ◆ The FCC's own analysis shows that since 1995, consumers who make fewer than 110 to 130 minutes of interlata calls per month have suffered a net increase in the cost per minute of a call.
- ◆ The FCC's own analysis shows that very low volume users – those who make at least one call per month, have experienced a near tripling of their long distance bills. This increase occurred after the companies began adding charges to the bottom of the bill.

2. Increasing Bills

16. Because Exhibit 2 includes only those who have actually placed a call, it does not incorporate the most dramatic impact of recent price changes. Those who made no calls have suffered even larger impacts. Exhibit 3 presents estimated bill impacts calculated in a different way to give an indication of cost changes for customers who placed no calls, as well as those who did place a call.

17. AT&T customers now pay about \$2.50 per month more in fixed charges to cover costs in the federal jurisdiction than they did at the passage of the Act.²⁷ With slight variation, other long distance companies have imposed similar charges. The most significant difference across the companies is the fact that MCI and Sprint impose universal service charges on a percentage of bill basis, which places a smaller burden on low volume consumers.

18. Moreover, AT&T and the other long distance companies have imposed minimum bill charges or fixed fee charges. As a result, the fixed cost of having a long distance carrier has gone up substantially. The fixed charges are spread over lower volumes, so the average cost per minute goes up. This minimum bill charge is the primary cause of the very large increase in per minute rates at low volumes of usage.

19. The long distance industry has offered a variety of discount plans, but these are structured in such a way as to attract and be restricted to high volume users. Through minimum bill requirements or minimum fees, the long distance companies segment the market and price discriminate. These plans do low volume users no good. The net effect of federal and industry rate restructuring is to shift costs from high volume users to low volume users and from high-income consumers to lower income consumers

20. Exhibit 3 presents calculations that show the impact of the rate restructuring on low volume user bills. It identifies five categories of customers based on the amount of monthly usage. The categories are no calls, 25 minutes of calls, 50 minutes of calls and 100 minutes of calls, and AT&T's most recent promotional plan (100 minutes at 7 cents/min). We include the latter to underscore how sharply the rate structure has tilted in favor of high volume users.

21. In all cases, I assume a single line customer, since low volume customers are likely to be single line customers. Multi-line customers have experienced even larger increases in their bills (an additional \$3.50). I have also not included the local number portability charge in this analysis. It is an additional \$.24 to \$.36 a month which will phase out in a few years.

22. Those who make no calls in a given month have borne an increase of over \$5 because of fixed charges on their bill. For consumers making less than 50 minutes of calls, the increase has been about \$2.00. These consumers escape the minimum bill charge, but cannot avail themselves of sufficiently attractive calling plans to save money. Customers making 100 minutes of calls have suffered a small increase. Customers at this level of consumption can probably break even by shifting calling plans. Those above 130 minutes have come out ahead.

23. AT&T's new \$.07 per minute plan is shown to be a very expensive plan for low volume users. Because of the high monthly fee, the consumer pays almost \$12.00 before he or she even picks up the phone. At 100 minutes the new plan is still more expensive than existing average rates at this level.

²⁷ I focus on AT&T because it accounts for just under 60 percent of residential toll revenues (FCC, Trends, p. 11-12). Since it tends to have lower volume users, it probably accounts for as much as 70 percent of all residential accounts.

24. To put these cost increases in perspective, I note that the increase in the cost of having a long distance company for low volume consumers constitutes a substantial increase for telephone service. In a month when a household makes no calls, it constitutes a 150 percent increase. At 25 minutes of calling, it constitutes a 27 percent increase. At 50 minutes, it constitutes an 18 percent increase.

25. Even looked at from the perspective of the broader telephone bill, it is a substantial increase. In 1996, charges for basic service were approximately \$16.50, exclusive of the subscriber line charge which is included in the above analysis. Including the SLC, rates were about \$20 per month. A \$5.50 increase is over 20 percent accretion and a \$2.00 increase is 10 percent.

B. THE MAJORITY OF RESIDENTIAL CONSUMERS HAVE USAGE AT LEVELS THAT INDICATE NET INCREASES IN BILLS

1. FCC Data on Usage

26. Having demonstrated that bills may have increased for consumers who make up to about 130 minutes have increased, I next estimate the prevalence of these calling levels among residential consumers. Exhibit 4 shows the basic data on which this analysis is constructed.

27. As shown in the Exhibit, the national average residential usage is 144 minutes for all toll calls – interlata, intralata and international. The median is lower, about 79 minutes.

28. The FCC's own analysis shows that the average number of interlata calls for residential customers was less than 100 minutes per month. Interlata, interstate calls accounted for only 71 minutes of use. I focus on this type of usage because these are the highly advertised rates to which the companies point when they tout the benefits of competition. That is, the widely publicized discounted rates are for interlata, interstate calls. Moreover, the bottom of the bill charges are for costs recovered in the interstate jurisdiction.

29. In any given month, approximately 12 percent of customers place no toll calls. The percentage of customers that place no interlata, interstate calls was much larger, 38 percent.

30. Thus, just as the average toll usage for calls in the federal jurisdiction is less than half the total the median is certain to be less than half the total or 40 minutes. To be conservative, I use 50 minutes as the median in later discussion.

2. Other Data on Usage

31. The other sources of data provide insight into the distribution of usage. Between 10 and 15 percent of the respondents to the surveys report no bill in a given month. The PNR and survey data indicate "low usage," defined as less than \$5 per month to be in the range of 20 percent of the total. For 1997, for which the billing data is available, this would consist of about \$2 of bottom of the bill charges and about \$3 of usage, or 20 to 25 minutes. For the most recent data, it should be recalled that a respondent reporting a bill of \$5 might actually have placed no calls. That is, bottom of the bill charges can equal or exceed that level, without any charges for calls.

32. Similarly, the FCC's analysis of the PNR data indicated that about 10 percent of the sampled bills fall in the range of 1 to 30 minutes of use.²⁸

3. The Number of Consumer Accounts Affected by Increases

33. Thus, the picture of the distribution of household usage up to the median is reasonably clear (see Exhibit 5). At least 10 million and as many as 20 million consumers make no interlata, interstate calls in a given month. Fifteen million would be a reasonable estimate.

34. Another 10 to 15 million consumers make between 1 and 30 minutes of interlata, interstate calls in a given month.²⁹ The best estimate for this group would be on the high side, 15 million. This means that between 30 minutes and the median of 50 minutes we find another 20 million consumers.

35. Beyond the median, the picture of the distribution of usage is less clear, since less public policy attention has been focused on the upper end. The survey evidence indicates that between 20 and 25 percent of respondents fall between the median and the mean. Conservatively, I set the number of consumers between 50 and 75 minutes at 20 million.

²⁸ FCC, Reference Book, 1999, shows about 2,000 bills in the 1-30 minute range. The approximate size of the PNR sample is just under 20,000 (Ford, p. 13).

²⁹ In converting percentage to the number of households, I use 100 million residential accounts. This is for ease of presentation and to take cognizance of the fact that, while there are 98 million households with telephone service, there may be a small number of multi-account households.

4. The Total Amount of Increases

36. Combining the estimates of price increases at various levels of usage with these estimates of the populations affected, I conclude conservatively that low volume users (those with usage below the average for interstate calls) have suffered a net increase in the long distance bills of at least \$2 billion a year (see Exhibit 5).

37. The 15 million households that place no calls in a given month are estimated to incur new costs of \$5.50 per month,³⁰ for an annual total of just under \$1 billion per year.

38. The 15 million households that make at least one call, but fewer than 30 minutes of calls per month are estimated to incur new costs of \$3.875 per month,³¹ for an annual total of just under \$700 million per month.

39. The twenty million households that make between 30 and 50 minutes of calls per month are estimate to incur new costs of \$2.12 per month,³² for a total of just over \$500 million per year.

40. The twenty million households that make between 50 and 75 minutes of calls per month incur new costs of \$.50 per month,³³ for a total of about \$100 million per year.

41. In total, this would lead to an estimate of \$2.3 billion in increased costs. It includes mitigation of the impact of bottom of the bill increases through discount plans at the higher levels of use. There could be some mitigation of cost increases at the bottom, if consumers can safely negotiate the perils of dial-around services. Thus, the estimate of \$2 billion is reasonable.

³⁰ This is the total of minimum usage at \$3.00 and PICC plus USF at \$2.50.

³¹ This is the average of the zero call category and the 25 minutes of use category in Exhibit 2. The impact would be the result of part of the MUR, and all of the PICC plus USF.

³² This is the average of the 25 minutes and 50 minutes of use categories in Exhibit 2. It reflects PICC plus USF, minus some reduction in per minute charges through discount plans at the higher end us usage.

³³ At this level of usage, a large part of the increase in the PICC and the USF increases is offset by discounts, but not all of it.

5. Other Evidence on Bill Increases

42. Other data shows that these estimates of the impact, on the monthly bill are quite reasonable.

43. For customers with no usage, who keep AT&T as their company, the \$5.50 is exactly what they pay today that they did not pay three years ago. Note that in the above analysis, the base of consumers to which this increase was applied is 15 million, not the potential 38 million who placed no interlata, interstate long distance call.

44. The AT&T data supports the estimate for users with some, but low volumes of use. In the AT&T data, when the zeros were excluded, the analysis showed that consumers would have paid \$1.71 for the minimum bill requirement (above their monthly charge for actual use). This would result in net increases of about \$4.21 per month when the PICC and USF line items are added. In the above analysis, I used an estimate of \$3.875 for households with calling usage between 1 and 30 minutes.³⁴

45. This general conclusion is also consistent with the aggregate data reported by the Bureau of labor statistics. The price index for interlata long distance rates was up for most of the period since the passage of the 1996 Act (see Exhibit 6). Only recently has it shown a decline of about 4 percent. Given the highly skewed nature of long distance usage and the targeting of competitive offers to high volume users, it is quite likely that the majority of consumers experienced a net increase in their rates.

46. For example, through November 1998, which is the date for which the most recent FCC analysis of rates at various level of consumption is available, average rates were flat in the CPI, compared to February 1996. They were up just under one percent compared to December 1997, just before the PICC went into effect. Rates for high volume users were down by 5 to 10 percent.³⁵ Since high volume users account for such a high proportion of usage, rates for the remainder of the population must have been up. The order of magnitude of the increase would be consistent with the above estimate.³⁶

³⁴ AT&T argues that these customers would have incurred the minimum charge approximately half the time. This means that in the months in which the minimum was not "binding" they would incur \$2.50 of increases. The average would be about \$3.35 per month. The analysis does not make clear how customers who drop to zero in a month are treated.

³⁵ The FCC analysis shows for 2/1996-11/98 a decline of 9 percent for consumers in the 270 to 330 minute range and 4 percent for consumers in the 500 or more range and for 12/97-11/98 declines of 1 and 5 percent.

³⁶ For example, given a .8 percent overall increase between February 1996 and November 1998, if the top 30 percent of consumers account for 70 percent of usage and received a 5 percent price cuts, the remainder of the population would suffered a 14 percent increase. If the top 30 percent of consumers accounted for 60 percent of usage and received a 10 percent cut, the remainder of the population would have suffered a 15 percent increase.

47. The FCC notes that recently rates have declined.³⁷ New discounts targeted at consumers with high levels of usage would easily account for all of that decline and then some.

III. LOW INCOME CONSUMERS ARE HARDEST HIT BY BOTTOM OF THE BILL CHARGES THAT RAISE THE COST OF LONG DISTANCE FOR LOW VOLUME USERS

A. LOW INCOME, LOW USE AND RATE INCREASES

48. Contrary to the claims of IXC's, there is a clear relationship between income and usage of long distance service. The higher the income, the higher the usage tends to be.

49. Exhibit 7 presents data from five different sources on the relationship between income and use. It includes the data on long distance usage from the two PNR studies introduced in this proceeding as well as the surveys. The evidence is overwhelmingly clear.

- ◆ Wealthy households make between two and three times as many calls as poor households.

50. The industry tends to analyze the population in quintiles and that is convenient for discussion purposes. I have given these quintiles names that are descriptive of their income levels as described in Exhibit 8. The five groups are the poor, lower middle, middle, and upper middle and wealthy. Because the survey data obtains income data in broad categories, it is not possible to match it perfectly with census data or between surveys, but the categorizations are reasonably consistent.

51. This does not mean that no low income households make a lot of calls, or that no upper income households make a small number of calls. It does mean that on average and for the majority of each group, low income households make fewer calls than upper income households do. As a consequence, on average and in the main, increasing bottom of the bill charges affect lower income households more frequently and more severely.

B. ASSESSING BILL IMPACTS ON INCOME GROUPS

52. Exhibit 9 describes the usage patterns for these groups in the 1995 PNR data. The data made available break each of the five income groups into deciles of usage. In other words, we are shown the average bill for each income group sorted into subgroups of usage defined as each ten- percent from lowest to highest.

³⁷ NOI, fn 17.

53. Recall that in the PNR data, the break-even point occurred in the category of 110 to 130 minutes. That is between 1995 and November 1998 usage rates in this group were flat. Consumers who used more enjoyed a rate decline. Consumers who used less suffered a rate increase. The average price paid in 1995 for customers who made 110 to 130 minutes of calls was \$.129 per minute.³⁸ This is slightly below the average price paid in 1998.³⁹ I assume that the break even level of usage in 1995 was 130 minutes,⁴⁰ or an average bill of \$17 per month for interlata calls.⁴¹

54. Based on this analysis, I conclude that more than half (56 percent) of households suffered net increases in their bills and the poorer they were, the more likely they were to suffer an increase. The percent of households shouldering a net increase broken down by income quintiles is as follows:

71 percent of poor households;

64 percent of lower middle income households;

58 percent of middle income households;

50 percent of upper middle income households; and

43 percent of wealthy households.

55. Thus, lower income households were over one-and-one-half times as likely to suffer net increases in their bills.

³⁸ Trends, p. 47 shows a January 1995 price of \$.1245 and a February 1996 price of \$.1332, for an average of \$.129.

³⁹ Trends, p. 47 shows an average September 1998 price of \$.1325 and a November 1998 price of \$.1293, for an average of \$.1309.

⁴⁰ The upper limit is used to reflect the slight increase for the category as a whole.

⁴¹ Since the average price for the 110-130 category still shows a slight increase, we set the break-even usage at the upper limit of the category. Multiplying 130 minutes by an average price of \$.129 produces an average bill of \$16.77. The bills that are reported by company sponsored experts based on the PNR data are likely to include other charges, like international long distance, which accounts for a small percentage of total calls but a much larger percentage of the total bill, since international calling is expensive. Therefore, we believe that using a \$17 figure is conservative.

C. AT&T'S SLEIGHT OF HAND: SORRY WRONG NUMBERS

56. AT&T presents an analysis that claims that there is virtually no relationship between income and usage. Unfortunately, the study that AT&T presents is totally flawed. Because it appears to have been consciously intended to confuse the issue, in this section I discuss why it went so far astray.

1. Constructing the Wrong Database

57. AT&T created a database of billed telephone numbers (BTN) and asked its consultant to analyze the low volume telephone numbers. That is, it identified each telephone number and asked the consultant to look at all the numbers that had long distance bills of less than \$3, AT&T's newly imposed minimum usage amount.

58. The BTN database does not reflect reality. AT&T does not actually bill customers on a billed telephone number basis. It bills them on an account basis. Customers pay one bill for all the telephone numbers in the account. We know that data on an account basis exists, since AT&T's consultant cites such data in his affidavit (Rosston, p. 22).

59. More importantly, AT&T does not impose the minimum usage charge on a telephone number basis. It imposes the charge on an account basis. In fact, in the very same filing that included the analysis of low volume telephone numbers, AT&T included an example of envelop stuffers that advise consumers that they can avoid the minimum \$3 charge by combining their numbers into one account. AT&T's consultant also notes that the consumers "probably can avoid a minimum usage requirement (MUR) by combining their bills" (Rosston, p. 37).

60. In spite of the fact that the account was the proper basis for analysis, AT&T's consultant took the BTN database and identified each telephone number that, based on its usage, would have been charged the \$3 minimum usage fee. The analysis recognizes that many of those numbers are actually second lines – perhaps Internet lines – that are not likely to be used for any long distance calling (Reston, p. 11).

61. As a result, the group of telephone numbers that is defined as low volume is made up of two types of lines. The first type consists of second lines, used largely by upper middle and wealthy people who tend to make their long distance calls on their primary line. The second type consists of primary lines used largely by poor and lower middle income people who cannot afford to make many long distance calls. Users of the first type of BTN are not likely to pay a minimum usage charge, since their long distance usage on their account is likely to be greater than \$3. Users of the second type of BTN are more likely to pay a minimum usage charge, since the low volume usage on the primary line is the total account usage.

62. With a database made up of roughly equal parts of rich people and poor people, it should not be surprising to find, as AT&T does, that the income of the average subscriber with a low volume telephone number is not different from the national average. This tells us nothing about what consumers actually pay.

2. Because Wealthy People are Much More Likely to Have Second Lines AT&T's Income Analysis is Wrong

63. To assess the impact of this error on the analysis, I used the CFA/CU/TXOPC survey. It showed that approximately 24 percent of all households have a second line. It showed that having a second line is decidedly an upper income phenomenon (see Exhibit 10). Households with incomes below \$35,000 are unlikely to have a second line (only around 10 to under 20 percent have second lines). Upper income households are more likely to have second lines, with almost half of households with incomes above \$100,000 having a second line. The median income of households with one line is approximately \$35,000. The median income of households with two lines is approximately \$56,000. This mistake in the fundamental definition of households subject to the monthly minimum usage charge clearly distorts AT&T's analysis and conclusion.

64. The survey analysis indicates the equivalent of 24 million second lines included in the sample of low volume users have an average income of \$56,000. The earlier analysis indicated that it would be reasonable to assume that there are roughly 25 million single line accounts included in this sample of low volume accounts (10-15 million with zeros and 10-15 million with usage between 0 and 20 minutes). These households have an average income of about \$35,000. The weighted average income would be just about \$45,000, which is just below the median in the sample.

D. OTHER INDICATIONS THAT AT&T'S ANALYSIS IS FAR OFF THE MARK

65. Although the other industry analyses leave much to be desired and there are questions about whether the PNR data is fully representative of the population, the PNR data also shows that AT&T's analysis is flawed. Unlike AT&T's flawed database, the MCI data show that there is a relationship between income and usage. Based on the MCI numbers, we observe that low use customers (defined by MCI as those with bills below \$5) have an annual income that was 18 percent below the national average. This is over five times AT&T's finding that the difference was only 3.5 percent.

66. Although MCI mischaracterized its data, the data actually shows that low income households are much more likely to be low volume users.⁴² As Exhibit 11 shows, if we compare the poorest fifth to the wealthiest fifth, we find that poor households are over twice as likely (27 percent) to have low usage (defined as bills below \$5) as wealthy households (13 percent). By this measure, low income households are more than twice as likely to be impacted by bottom of the bill charges. This relationship recurs in the survey data as well.

67. The other industry analysts are fond of pointing out that some low-income households make a lot of long distance calls.⁴³ This observation obscures the fact that 80 percent of poor households made less than the national average in long distance calls and 75 percent of lower middle income households and 65 percent of middle income households made fewer than the national average in long distance calls.

IV. CONCLUSION

68. The above analysis looks at bills and prices. It uses survey and other data. It takes into account a reasonable amount of shifting between service offerings to mitigate the impact of bottom of the bill charges. All the evidence points to one conclusion, the majority of consumers have suffered a net increase in their bills as a result of long distance industry rate restructuring and low income users have suffered the most.

69. Industry claims that consumers can shift between plans to avoid the impact entirely are dubious at best. It is quite clear that discount plans are of little use to low volume consumers since minimum use requirements make them even more expensive than the \$3 minimum imposed on basic rate customers. Discount plans are targeted at high volume users.

⁴² MCI has engaged in a most remarkable distortion of the data to reach the conclusion that increasing charges for low volume consumers is not a problem. For example, it concludes its analysis with the following observation.

Low usage (defined by bills less than \$5) is common at all income levels and is only slightly more common at low income than [sic] at higher incomes. For example, 19% households in the second quintile and 16% of households in the fourth quintile have long distance bills less than \$5 (Ford, p. 14).

To begin with, the number given for the second quintile should be 21 percent, not 19 percent. More importantly, why base a statement comparing low and higher income households on the second and fourth quintiles? Why not compare the first and fifth quintiles?

⁴³ Crandall, p. 404.

The top ten percent of households with incomes below \$10,000 spend more than \$90 on long distance calls in our sample month.

70. Dial-around services might save low volume users some money, but they are difficult to research and highly targeted at specific types of calls. If the consumer does not make the right type of call, he or she can end up paying a very high rate. I find it particularly ironic that the IXCs point out that information is readily available on the Internet and that consumers can get very attractive pricing by agreeing to take their customer service and billing detail over the Internet. Since access to the Internet is closely associated with income, this only underscores the problem that low income, low volume users face (see Exhibit 12).

71. Data on the number of consumers who have given up the luxury of having a long distance company (i.e. who have been de-PICed) have not been presented. The dollar value of dial-around business is small, compared to the total of long distance. Moreover, since dial-around rates are structured to yield high charges per call rather than high rates per minute (i.e. rewarding long calls) the number of calls it accounts for is even lower. Moreover, given the movement of average rates, it is simply not possible that dial-around use could mitigate the increase in actual bills paid sufficiently to change the basic conclusion.

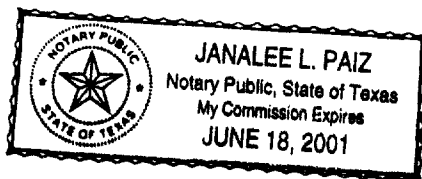
72. The irony with claiming that dial-around services might save consumers money is that the FCC and the industry touted one-plus dialing as convenient and crucial to competition. We now find that low volume users, who helped pay for one-plus dialing, are forced to go back to dialing seven digits by the brutal price discrimination that competition for high volume users has fostered. In the unlikely event that low volume users do save some money with dial-around service, they suffer the inconvenience of dialing extra digits; the problem of having to figure out on each call which of the services might be less expensive; the risk of being charged multiple universal service charges; and the indignity of knowing that one-plus dialing that they helped to pay for does them no good.

Further, the affiant sayeth not.

Mark Cooper

Mark. N. Cooper

SUBSCRIBED and sworn to before me this 14th day of October, 1998



Janalee L. Paiz
Notary Public, State of Texas